ABSTRACT

A system for inserting an increased amount of information into DCT coefficients generated in blocks from image data is disclosed. Additional information is first inserted into input DCT coefficients in a block by changing at least one DCT coefficient of the input DCT coefficients to produce changed DCT coefficients. A level of one DCT coefficient selected from the changed DCT coefficients in the block is corrected to produce corrected DCT coefficients. The one DCT coefficient is selected so that a total code length of codes generated from the corrected DCT coefficients is equal to an original total code length of codes generated from the input DCT coefficients in the block.